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SIMPSON, LECTURES ON THE DISEASES OF WOMEN, 8 PAGES.

## CLINICS.

### CLINICAL LECTURES.

*Clinical Lecture on the Renewal of Life in Continued Fever.* Delivered at St. Mary's Hospital, Oct. 16, 1861. By THOS. K. CHAMBERS, M. D., Lecturer on Medicine, and Physician to the Hospital.

GENTLEMEN: You saw a case of Continued Fever admitted into Albert Ward four days ago, which presents a good many points valuable for instruction.

Charles P., aged 15, a shop-messenger, who has grown rapidly lately, and has been worked perhaps rather beyond his strength, stated on admission that he had felt ill, languid, and unequal to exertion for six weeks. During the past fortnight he had come home every evening entirely without appetite for his supper, and had sat cowering over the fire in a shiver. For three days he had had vomiting of all food taken, diarrhoea, and pain in the belly. Cough also had come on

with pain in the right side during respiration. He had expectorated transparent mucus with sooty specks in it.

On examination there was found on the surface of the abdomen and chest upwards of a dozen dingy fever-spots in several stages, some entirely disappearing on pressure, some not. There was no pain or gurgling on pressure of the bowels, and the diarrhoea was stated to have ceased. There was great muscular languor and inability to stand, and a very weary, dull look in the eyes. The right cheek was flushed. The lower part of the right lung was dull on percussion, and there were moist cracklings in it not very fine, and dry whistling râles scattered about the rest of the lungs. The tongue was thickly coated with yellow; the skin was hot and dry; the pulse 104, small and sharp. The urine was high-coloured, and deposited a copious yellow sediment, soluble by heat. The quantity passed during the next twenty-four hours was fifteen ounces of the specific gravity 1.020.

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The boy's mother stated that they lived in a healthy attic, dry and free from foul odours, and could in no wise account for the illness.

This is a sporadic case of the ordinary Continued Fever, common during the autumn in this metropolis, complicated by an intercurrent pneumonia. It has presented all the most important symptoms without the patient being so ill as to be unable to tell his story, or to make the repetition of it, and the examination of pupils dangerous to him. I will call your attention to what you may learn from it.

There is every reason to believe that the exciting cause of these fevers is a poison generated by decomposing organic matter and received into the body from without. It appears to be widely diffused through the air, especially in the neighbourhood of its origin in the air of sewers, putrid marshes, and crowded human habitations. If you are readers of popular sanitary literature you are probably satiated with the accumulated and *decries repetita* evidence of this fact. You are inclined to ask how it is, if the poison is spread so broadcast, that everybody does not get poisoned. You will wonder why it should get into the body of this boy, whilst you, really much more exposed to it, escape. But remember there are two things necessary to poisoning, not only the poison, but a person liable to be affected by it. And, in point of fact, the latter is the most important element in the transaction. It is only on a predisposed body that a morbid poison acts. It is most likely that we are all constantly taking in minute doses of typh (the exciting cause of these continued fevers), and that we can digest, oxidize it, or otherwise render it innocuous under ordinary circumstances. But should some epidemic influence or exceptional deficiency of vitality deprive us of the power of doing so, then we suffer the effects and have typhus fever or typhoid fever, as the case may be. There was sufficient reason for this boy being the victim while others escaped shown in his recent rapid growth and in his strength being overtaken by his work. The exhaus-

tion of vitality allowed the poison to do its work.

Observe how slowly the poison acts in some cases. Our patient is upwards of five weeks ailing before any of the distinctive features of his fever show themselves, and then they appear one by one. The time is not usually so long, especially during epidemics, but you may detect it in the history of almost every case. And you ought to notice it, because from some systematic works you might be led to suppose that a continued fever was easily to be measured by days and hours from the exact minute of invasion. This is impossible in practice, and would be of little use were it possible.

I am inclined to think that the usual path by which the poison enters is the digestive canal. It is mixed with the saliva and carried down to the stomach, where it possibly may accumulate and be multiplied in the gastric mucus. During severe epidemics it has been observed that those who smoke, that is, stop up their mouths with tobacco, and spit out the saliva instead of swallowing it, are less liable to be attacked. And in an early stage, even after the poison has begun to act upon the system, the fever may be arrested by emptying the stomach; and thus apparently preventing the whole dose being taken up. Those who have watched my practice will have seen several instances of the success of this treatment, the fever cut short and convalescence entered upon immediately with its painless debility and emaciation gradually passing away.

One case last autumn gave me the opportunity of recording that the influence of the remedy is not merely apparent or accidental, but that it really removes an essential part of the disease. W. S., a robust lad, aged 15, came into the Hospital September 5, 1861, with hot skin, rigors, excessive muscular languor, pain in the back, limbs, and head of four days' duration, gurgling in the right iliac fossa and rose spots. For the first twenty-four hours he had no medicine, and the urine was kept and analyzed. The result exhibited the following quantities of its various constituents daily excreted:—

Date.	Quantity in cubic centimetres.	Specific gravity.	Urea (grammes).	Uric acid.	Chloride of sodium.	Sulphuric acid.	Phosphoric acid.
September 6, 1860 . . . . .	1000	1027	50.63	.43	.25	3.48	3.24

Then an emetic was administered, and coincident with an universal remission of all the symptoms, the urine exhibited the following remarkable change in the amount passed during the next five periods of twenty-four hours:—

Date.	Quantity in cubic centimètres.	Specific gravity.	Urea (grammes).	Uric acid.	Chloride of sodium.	Sulphuric acid.	Phosphoric acid.
September 7 . . . . .	530	1028	29.37	a trace	0.79	1.97	1.14
September 8 and 9: mean of two days, urine mixed . . . . .	770	1016	14.79	0.037	2.68	1.008	0.72
September 10 . . . . .	1200	1011	18.42	0.090	4.20	1.34	0.32
September 11 . . . . .	1320	1006	16.71	a trace	4.62	0.96	0.71

Now, the contrast between these specimens of urine is exactly that which is found between the urine during fever and the urine during convalescence. In the first there is evidence of destructive metamorphosis going on with extreme rapidity; in the latter the destruction is overcome by renewal. And this change into convalescence was most strikingly marked as due to the operation of the emetic. When we see so often the immediate consequence of one dose of so simple a remedy, it is difficult to avoid the conclusion that its benefit is purely mechanical; and that it acts by removing from the mucous membrane of the stomach a poison only partially absorbed and still adherent to it. Another reason for suspecting that the gastric mucous membrane is an early if not a primary recipient of the poison, is that it early exhibits such special phenomena as usually accompany the ingestion of an unwholesome material. Spontaneous vomiting is very generally found in the first stage of fever (as you have observed in the patient under consideration) and seems to offer a presumption that the part which is then most feeling the effects of the poison is that organ which most resents it—the gastric mucous membrane. Such is the evidence by which I have been led to believe that the exciting cause of continued fever enters usually by the digestive canal—*valeat quantum*.

When the poison has once gained admission and is diffused by means of the circulation through the system, its effect is to destroy the vitality of a considerable amount of the organic living matter with which it comes in contact. The destruction is interstitial, not local—I mean, it does not kill absolutely a certain spot which it touches, like sulphuric acid, but it kills only certain constituents of the tissues. The destruc-

tion is partial, not entire—the organic matter is not utterly disorganized, but only reduced to a less vital, less organic condition. It may be traced easiest in the alterations found in the medium by which it is diffused. The blood, the common thoroughfare for distribution of good and evil to the tissues, exhibits a serious change. If you examine it under the microscope you will find that the normally shaped red disks are diminished in numbers as compared with what Pathologists call “melanosed” corpuscles, that is to say, dying or dead disks, shrivelled and small, of a dark colour, with black specks in them, and with gimped edges. In bad cases these are unable to range themselves in rolls, as healthy blood does when it coagulates; they seem to have scarce any attraction for one another and lie in amorphous heaps. They dissolve easily in the serum and form with it a red fluid. You may trace this dissolution in the dusky stain which the blood communicates to the skin in low fever.

This poisoning goes on very gradually in some cases, and apparently quicker in others. You heard from this boy that he was five weeks ailing before he gave up work. There was an imperfect renewal of the body, evidenced in the languor after exertion and in the loss of appetite or deficient demand for new material by the formative processes. But destructive assimilation is not arrested, there is no stop to the removal of the effete tissues by excretion. I think it is possible that in a great many cases the disease, the partial death, may stop here, the destroyed tissues and their destroyer together be disorganized, be reduced to their elements and pass away. The idea is incapable of proof, but it would account for a vast number of those mysterious languors,

unclassified, unnamed, and often unpitied, which distress patients and puzzle Doctors. However, when the poisoning has reached a certain pitch, the nervous system cannot but take notice thereof, and express itself in the most common mode of taking notice of partial death, namely, by a shivering fit. Any severe injury to the body, a stretching of fibrous tissues, an operation, the fear of an operation, the absorption of destructive drugs, such as antimony, for example, will cause more or less of a rigor in proportion to the sensitiveness of the individual. And thus also when an interstitial death of some constituents of the body arrives at a certain point, there is a rigor. This rigor recurs from time to time at uncertain intervals, but generally about once a-day.

Then commences another symptom of partial death—pain. This boy described his head, his limbs, and his back as aching all at once. That is to say, wherever there was most tissue with sensitive nerves in it, there was pain, indicating the diseased state of that tissue. Now all this aching is a symptom of the earlier, rather than of the more advanced stages of fever; not because there is latterly less death, but because the nervous system becomes partially dead too, and does not feel so acutely.

Observe that this patient tells us of nausea and loss of appetite, which diminished the food eaten—of vomiting, which rejected the greater part of that diminished food—and of diarrhoea, which carried off the remainder scarce digested at all. Yet in spite of this, the amount of solid matter passed from the kidneys is considerable; the specific gravity of the fifteen ounces of urine passed in the twenty-four hours is 1020. The metamorphosis, therefore, of the dead effete tissues into urea and salts is quite as active as in health. There is a continuous destruction of them in spite of the defective supply. This goes on as long as the fever poison lasts in the body, but when it is got rid of, the destruction ceases, no more is metamorphosed than is required to make room for new material, and the specific gravity of the urine falls during convalescence. This may take place very suddenly, as in the instance I gave you of a fever cut short by an emetic; but in general the alteration is more gradual.

I have mentioned the large amount of urea in proportion to the nutrition in the urine of continued fever, which is rendered

evident by its high specific gravity. There is also an increase very evident to the naked eye in another constituent of some importance, the coloured organic material, which gives the secretion its ordinary hue. You saw how dark this boy's water was, and how deeply it stained the vessel from which I poured it on a piece of white linen. There is great reason to suppose there is a close alliance between this substance and whatever gives the red tint to the blood-disks, and that its excess depends on excessive destruction of those important little living particles.

The sulphuric acid and phosphoric acid, combined with bases, which form a necessary part of urine, do not, in continued fever, follow the lead of the urea; their amount is less than in health. Whether this is due to the destructive metamorphosis taking less effect on the chief tissues containing sulphur and phosphorus, than it does on the blood and muscles, is uncertain. Dr. Parkes suggests that perhaps a third of the normal sulphates and phosphates of the urine are derived directly from the food, and not from the metamorphosis of tissue; and therefore that their diminution in continued fever may be owing to the starvation, while the amount which still remains represents a fair proportion of destruction<sup>1</sup>.

The chlorine, in the shape of chloride of sodium, is also in small quantity, but not so deficient as to lead us to suppose that the metamorphosis of the chlorinated materials of the body does not go on, or that there is retention of it in the fluids. The great quantity of chloride of sodium taken as food, and directly mixing with all the fluids, again introduces a difficulty of observation. And another is offered by the frequency of intercurrent pneumonia, which itself causes a retention from the kidneys of chlorides. This patient, for example, has a little pneumonia, and we could not, therefore, say if absence of chlorides in his case were due to that inflammation or to typhoid fever. Other frequent impediments to knowledge are diarrhoea or colliquative sweats.

The diarrhoea so frequently accompanying low continued fever is a further evidence of death in the blood. Let the fluid fever stools be set to stand in a tall glass, and you will see them separate into two parts; the highest a semi-transparent serum, in which

<sup>1</sup> Parkes "On the Urine," B. II., chap. iii., sect. 4.

float epithelium scale and crystals of ammonio-magnesian phosphate; the lowest stratum a greenish-black flocculent precipitate. This last has no smell of bile, nor is bile to be discovered in it by chemical tests; but it contains broken-up blood-disks and a great quantity of dark, granular colouring matter—it is just like blood, altered by the secretions of the bowels. And very often, when you let the stools separate in this way, and look at them by transmitted light, you will see a visible sanguineous tinge in them; very often blood mixed with mucus is passed from the bowels. Blood, too, is not infrequently spit up with the mucus from the lungs, and drips from the nose; and in bad cases the dried up mucous membrane of the mouth cracks, and exudes the sanguineous serum on the surface of the tongue, producing the “dry, brown tongue” of severe fever. All these prominent symptoms call your attention to the interstitial death, the lessened life of the body.

The increased heat in fever is to the superficial observer rather adverse to the doctrine which I have advanced, of all disease being an evidence of diminished vitality. And, in truth, it requires some thought to see why it is not really so. But a complete answer to the idea of an augmentation of heat being necessarily an augmentation of life, is afforded by the fact of many recorded instances of the increase of corporeal warmth having taken place in corpses actually after death; so that, discarding at once the notion of its being a proof of vitality, we may try and trace what causes really rather to be associated with death may give rise to it in the cases under our eye. In the first place, in fever you have a diminution of the evaporation which takes place from a healthy skin, and which acts as such a powerful refrigerator, as any physiologist who has perspired knows full well. The dormant dry skin does not do its cooling office. Then, in the second place, there is a much larger quantity of dead matter to be evacuated, and the destructive metamorphosis of this, the semi-vital chemical destruction, raises the temperature, as all chemical solutions do. Wherever metamorphosis is rapid, the temperature is raised. But this metamorphosis alone, this passage of living into inorganic matter, cannot be called an increase of life, inasmuch as it indicates an advance of death. It is necessary indeed to the removal from the body of poisoned ingredients,

and is so far an advantage, but still it is an indication of the quantity that is poisoned.

Cooling affusion is sometimes spoken of, both by opponents and advocates, as “checking” or “arresting” the febrile heat. This is apt to give you a wrong notion. If it really arrested the metamorphosis which is the cause of that heat, it would be obnoxious to all that could be said against it. But, in fact, it no more “arrests” or “checks” the heat than emptying the bladder “arrests” the secretion of urine. A moment’s thought will show you that what it does is to remove the heat from the external surface, and if it affects the cause of heat at all, it would rather encourage it by making room for more.

Such are some of the most prominent consequences of the typh poison in the human body.

You may remember that, in the first Lecture, I warned you against the Evacuator’s or Humoral Pathologist’s doctrine of a *materies morbi*, which he looks upon as the disease, and which he thinks he has done his duty by endeavoring to eliminate. “Surely,” you will say, “this which you have been describing is a most typical *materies morbi*; if I eliminate this, I cure the disease.” Not so fast—the bullet which enters the soldier’s ribs is a *materies morbi*—have you cured the disease when you have extracted it? Nay, more—suppose the bullet passed right through the chest and went out on the other side, would you consider the disease gone? No, the typh poison is not the disease, any more than a bullet, or sulphuric acid, or opium is a disease, though all may be a material cause of disease. The partial death which these agents cause is the disease—is that which requires to be treated, and must be the chief point for the physician’s consideration.

Here, then, we bring our doctrine of RESTORATIVE MEDICINE to its touchstone—bedside application. The Restorativist asks himself, What vitality is wanting, and where? What material is wanting, and where? And, How shall I easiest supply them?

In the first place, if he sees the case early, almost the only thing he notices is the lowered vitality of the stomach—how badly it digests its food, and how it loathes its usual work. He conjectures that its function is arrested by the presence of some poison, and he empties it with an emetic. In many

cases, early in the disease, this cuts it short at once, as I told you in a former part of the lecture, and as you have many opportunities of observing in the wards.

Secondly, supposing he is too late for this *coup de main*, he remarks that the skin is hot and dry, in a great measure from deficient perspiration and evaporation on the surface of the body. He undertakes to supply this want by an artificial moisture. He sponges the whole person over three or four times a-day with tepid water, to which the nurses here generally add some distilled vinegar to make it more agreeable. The relief given is most sensible and immediate; but of course it soon passes away, as changes of temperature are in their very nature temporary. It must therefore be frequently repeated.

I confess I am somewhat cautious about the employment of aqueous affusion where there is pneumonia in fever. It sometimes chills the chest and causes an attack of pleurisy on the inflamed side. Besides which it interferes with a plan I have of keeping a large poultice outside the affected part, and which I find so beneficial in pneumonia that I do not like to omit it. For this reason it was not done in the case of the present patient.

Thirdly, he sees that a large supply of nitrogenous material must be wanting. The nitrogenous tissues are devitalized, are running away in an enormous excretion of urea and other organic compounds, and nothing is taking their place. Shall he act allopathically, and give some drug whose tendency is to stop the passage of urea by the kidneys? I do not know exactly how he would set about it; but I know that if he succeeded, he would do an infinity of harm; for the very worst cases of fever are those in which metamorphosis is active (as shown by the heat), while the excretion of urea is arrested (as shown by the lightness of the urine); they resemble cases of urea poisoning from diseased kidneys. The other principles of treatment which I noticed in my Introductory Discourse<sup>1</sup> would not perhaps be so directly injurious, but common sense would still assign the palm to Restoration here. Let it be your chief aim to supply that which you so clearly see is passing away—nitrogenous food.

But how will you supply it? Solid meat

would in all probability be vomited from the intolerable loathing it excites. If not vomited, it would lie for some time a mere foreign matter outside the mucous membrane of the digestive canal, and then pass away by diarrhoea with much flatus and fetor and much disengagement of gas during putrefaction. Your beef-steak might as well have been originally thrown down its final destination, the water-closet; to which it passes putrid though undigested. Neither is it wise to fill the stomach with large quantities of victuals, for the same result follows. No "meals" must, therefore, be taken. The prudent plan is to give very small doses of liquid nitrogenous aliment very frequently. These pass over the irritated stomach as if on the sly, and are taken up gradually by the intestines, requiring but very little digesting to make them fit for absorption. The best adapted food is that which is naturally supplied to the weakest stomach. The feeble digestive organs of babies can assimilate milk, and milk forms the most appropriate nourishment for the debilitated viscera of the fever patient. By giving two or three ounces every hour you may get down about a quart and a-half per diem. But in ordinary instances every two hours is often enough, and that period is adopted for the boy before us. If there is sufficient acid left in the stomach to coagulate the casein into clots, and cheesy lumps are rejected by vomiting, as happens sometimes in milder cases, you may guard against this by adding liquor calcis, or soda-water to the milk, or you may supply its place by beef-tea. But it is the lumping of the cheese into solid masses that it is desirable to avoid, not the acidification, which is beneficial. If the patient takes thus a good supply of milk and beef-tea, not only is the immediate danger of death by starvation avoided, but the emaciation which follows during convalescence is much less extreme, and the dangers in its wake less formidable.

Eggs are a highly nutritious food; and, if taken raw, diluted with milk or water, they are quickly absorbed. But should they be delayed and putrefy, the products of their decomposition are peculiarly injurious; the sulphuretted hydrogen and ammonia evolved are poisons to the intestines. I should recommend you to avoid them till convalescence has restored the gastric powers. The same objection does not lie against milk, the lactic acid arising from

<sup>1</sup> See *Medical Times and Gazette*, November 2, 1861, p. 449.



whose decomposition assists in the solution of the casein. Sour buttermilk is by no means to be despised as a food.

Fourthly. The Restoriatist turns his attention to the *Materia Medica*, and considers what he can cull from thence which will be of service.

You have been taught in the systematic course on Medical Pathology, that ammonia, which is always being formed and given off from the animal body, is found much more abundant in certain conditions than in others, and that these conditions are those in which nutritive metamorphosis or growth was deficient as compared with destructive metamorphosis, or those in which there is retention in the blood of the products of that destructive metamorphosis. Thus, more ammonia is found in the breath after exertion than after rest; more than usual in those who injure their digestion by smoking tobacco: a great deal in uræmia, where the urea cannot escape by the kidneys; but above all, in continued low fever is this exhalation of decay noticeable, as you will find in Dr. Richardson's valuable work on the "Coagulation of the Blood,"<sup>1</sup> where the phrase "super-alkalinity of the blood" is applied to this condition. Dr. Richardson goes so far as to attribute to this super-alkalinity the special typhoid symptoms, and to suggest that the absorption of ammonia in excess may intensify fever in those who contract it from exposure to decaying organic matter, or human exhalations. He supports his hypothesis on the experiment of inducing the symptoms, or something resembling them, by the injection of ammonia into the veins of an animal. The word "super-alkalinity" is expressive, and quite unobjectionable, so long as it is understood that the superabundance is not absolute, but comparative. For it is not shown that there is more alkali in the body than there ought to be, but more than there is acid to neutralize. "Sub-acidity" would be a synonymous term, and, perhaps, would be more suggestive of the means we have at our disposal for remedying the defect.

Very difficult indeed would it be for the Eliminator to get this alkali out, but it is easy for the Restoriatist to get acid in. The acid I have always given is hydrochloric, and you consequently see on this lad's card: "R.—Acidi hydrochlorici diluti ℥℥ss, sy-

rupi ʒj, aquæ ad ʒj, alternâ quâque horâ sumat."

Rich patients like a little more sugar, and the draught is usually approved of even for its taste. But it is still more approved of for its beneficial effects. This boy said to-day of his own accord he hoped I should continue the draughts, they made him "feel so much stronger," meaning to express the sensation of relief to the depressing, wearying languor of fever. In mild cases the tongue begins to clean immediately, the thirst and diarrhœa much abate, and the repugnance to food is diminished.

Whether other acids would do as well as the hydrochloric I cannot say, but it is so largely diffused through the body combined with alkali as a constituent of the tissues, that it appears peculiarly suited to the purpose. I have now used it in every case of low fever for four years, and have not lost one, except a woman who came in here with deep ulcers in the bowels, and was killed by perforation. In a clinical lecture at this Hospital in January, 1858,<sup>2</sup> I gave the details of the first dozen cases treated on this plan, and I must say that my confidence in it is by no means diminished.

As you are a different audience from that which heard me at that time, perhaps I may be allowed to quote in repetition my own words—"What blood, when analyzed, comes nearest in its altered proportions to the blood in low fever? Is it not that in scurvy and purpura? There is the same excess of blackened (melanosed) blood disks, the same deficiency of neutral salts and organizable (coagulable) lymph. Everybody treats these chronic affections with acids, and why not also an acute affection which corresponds with them in one point at any rate? As to the particular acid employed, muriatic certainly deserves to be tried before others—first, because it is such a large constituent of the body that it might almost be called a food instead of a medicine; and secondly, because it is such a powerful arrestor of the decomposition of animal matters. Pour it into a sewer, and you destroy the miasma. May it not in the body stop that miasma from poisoning the tissues?"

The allusion in the last sentence is of course to chlorine as a disinfectant. But I do not know that there is any evidence of the benefit derived from the hydrochloric

<sup>1</sup> Richardson on the "Cause of the Coagulation of the Blood." Appendix I. (Edit. 1858).

<sup>2</sup> Published in the *Lancet*, January 30 and February 6, 1858.

acid treatment being due to this property. About sixteen years ago, I employed chlorine water as a medicine in fever at the Chelsea Dispensary; but I was not encouraged to carry on the treatment by tracing any benefit to it. Whether the chlorine which can be introduced in this way is not sufficient in amount (for it must be dilute, or it induces so much choking), or whether it is really useless, I do not know; but I left it off for years, and adopted the muriatic acid from the description which Mr. Ash gave me of the advantageous use of it by Dr. Mackenzie.

As to the use of alcoholics in continued fever, I am guided almost entirely by the condition of the nervous system. If there is very complete prostration, delirium of a low muttering character, it is required. A tremulous state of the muscles, marked especially by a quivering of the hands and fingers, is a good test of the necessity for it; and so is a sharp, weak, unequal beat of the heart. All these indicate that the nervous system is feeling very sensitively the destructive metamorphosis going on, and has its power reduced by its sensitiveness. Then is the opportunity for the powerful anæsthetic alcohol, which in severe cases you see me order without scruple, but which I do not rank as part of the systematic *methodus medendi* of continued fever, and have not yet ordered for the lad we have been prescribing for. Above all, I would caution you against employing wine as a substitute for the true restorative treatment which I have been describing. It may be useful as an adjunct or to assist it, but never in its place.

There is, though, another of the adjunctive methods of treatment—exceptional, but often required—which has been employed with utility in this case—the local abstraction of blood. The boy had congestive pneumonia of the lower lobe of one lung, and I did not hesitate to cup him beneath the scapula on that side. And not unfrequently when there is pain in the right iliac fossa, with diarrhoea and tenesmus, I put leeches on the belly at the seat of pain. You saw the dulness on percussion rapidly pass away from the lower lobe in our patient here; and you will often see an equal relief to the abdominal congestion by a corresponding agency.

But you will cry out that I am sadly inconsistent. I am feeding up the patient

with one hand and taking away his *pabulum vitæ* with another. The reproach is just in a sense, but that a very limited one; and, in fact, may be levelled against half the operations of daily life. We are constantly suffering a small loss for the sake of greater gain. And I think the loss of a little blood is insignificant compared with the advantage of securing a freer circulation through the lungs, a diminution of congestion in the intestinal canal. Do not be led away by the superficial notion that blood is blood, and blood is life. That is not true, for the blood varies immensely in its composition, some being very valuable, and other worthless. To lose some of the half dead circulating fluid of fever is but little loss, and that little loss is amply compensated for by the additional nutriment which a small bloodletting will enable to be absorbed. The deficiency is soon made up again under the restorative system.

In the sequelæ of low fever, more than in any other disease, the great difference between one patient and another as respects their power of recovery, lies in their stomach. There is a little girl of four years old, now in Victoria Ward, who was admitted, on the 2d of September, for rose-spotted fever, which had come out during the concluding week of August. She got through the fever pretty favourably, but for the last seven weeks has had a succession of most formidable abscesses in the back, the cervical glands, the internal ears and the parotid glands; yet, in spite of the exhausting effect of the large discharge of pus from these spots, she has continued advancing in convalescence, she has gained flesh and muscular power, so that now she can sit up. For this favourable result she has to thank a most wonderful appetite which never seems satisfied, even with an amount of food which is large for an adult, and which she delights to wash down with wine and porter. No tonics seem of so much use to her as an extra snack at physic time.

The most extraordinary recovery from these pyæmic abscesses after fever you witnessed last year in a girl of sixteen (E. A., admitted September 28, 1860). She had very putrid fever, accompanied by hæmoptysis, epistaxis, and bloody discharge *per vaginam*. She got well through her fever by the help of hydrochloric acid and wine. But as she became convalescent in the third week in October, she began to have large



boils or abscesses on the head; these were followed by abscesses running down into sloughing sores on the back. During the first week in November inflammation and swelling of the left leg began. This quickly ran on to purulent infiltration of the whole of the left thigh, which, on November 28, discharged two pints of pus in twenty-four hours, and lesser quantities daily for weeks together. On December 12 there was a large abscess in the axilla, which was opened and discharged several ounces of pus. Her state of debility was such that she could not in the least help to feed herself. Yet all this time her stomach was in a state that a gourmand would regard as the seventh heaven. She was literally always hungry. As she swallowed her last bit of beef-steak she would feebly ask when she was to have some more, and what would be her dinner to-morrow. And the way her eager eyes followed any particle of victuals that passed her bed was quite affecting. She could fully have sympathized with the British tar who defended the West Indian climate:—"Bad climate this! I call it a capital climate; you're always thirsty, and there's lots to drink." So we allowed her wonderful appetite full swing, and fed the delicate puny maid like a gigantic navy or gladiator. The consequence was that she recovered from an amount of purulent disease which it would have seemed impossible for the human frame to support, and recovered perfectly, for I saw her in April looking as healthy and walking as briskly as if she had never been ill.

The moral of these cases is, do all you can to increase the appetite. Judge of the value of this drug and that drug, this tonic and that tonic, solely by the effect it has on the desire for food. If any remedy lessen this, insist upon leaving it off, whatever authorities may have recommended it; and form your judgment, not from tradition or prescription, but from its action in the individual case before you.—*Med. Times and Gaz.*, Nov. 23, 1861.

*Cases of Epilepsy with Clinical Remarks on the Use of Bromide and Iodide of Potassium in that Disease.* By Dr. WILKS.—It is well known that epilepsy or epileptiform fits may result from various causes, existing both within and without the brain; dependent, that is, upon organic changes of structure or upon the condition

of blood circulating through the organ. As so many causes produce epileptiform symptoms, it is necessary to ascertain in the first instance how the term is to be defined. Now-a-days it is pretty generally admitted that epilepsy is a disease which exhibits on the post-mortem table no structural change. Moreover, it is a disease which may last for years, and leave the patient in tolerably good health in the intervals of the fits. Very different, however, are the convulsions arising from organic disease of the brain, which can only endure for a limited period, and then sooner or later have other symptoms to accompany them. So also "fits" arising from impure blood from renal suppression. With this general understanding of the subject, although during life, from the obscurity of the symptoms, history, etc., it may be a question as to the existence of true epilepsy or not; yet if on post-mortem examination we find a diseased kidney or an organic disease of the brain, we may come to a correct conclusion as to the nature of the case, and we style that alone epilepsy where no marked organic disease is found. Generally speaking, tumours in the brain show other symptoms sufficiently diagnostic. The most difficult cases to distinguish from pure and simple epilepsy are those where either from disease of the bones of cranium or membranes, an adhesion occurs between the latter and the brain, which produces a class of symptoms not distinguishable in many instances from true epilepsy. Bright very sagaciously observed that in epilepsy arising from a local cause, where the whole brain is not affected, consciousness often remains; this no doubt is often true, but whether a sufficiently marked symptom to afford the basis of a diagnostic difference between this form and others, we can scarcely say.

We have made these remarks in order to explain, as we think, a treatment which is singularly efficacious in those cases of epilepsy which are due to a local affection arising either from syphilis or injury. Every practitioner could quote from his experience cases where a most remarkable success has resulted from the use of iodide of potassium when the cause has appeared to be syphilitic, and also now and then a case where a course of mercurials cured the patient. As it is, however, often difficult to recognize such a cause, we have of late years, before

commencing the ordinary and most approved anti-epileptic remedies, began the treatment with the iodide or bromide of potassium. We formerly gave the iodide, but subsequently changed it by way of experiment for the bromide on account of having seen better results with the latter remedy in cases of bronchocele and glandular swellings. About this period, also, the bromide was recommended by Sir C. Locock as a remedy having some influence over the ovary in females, and therefore curative of those epileptiform affections which might be due to an irritation of this organ. Although this theory was questionable, yet if it were founded on any facts showing the efficacy of the remedy, this was an additional reason for adopting it; and we thought equally good for all cases, whether men or women. Since using this remedy, Dr. Wilks added, now for two or three years, and in a large number of cases, he had undoubtedly had more success than heretofore, being fully aware, he said, of the remarkable fact that epileptics generally seem to be better on any new remedy, whatever its nature may be, and, also, that should it exert a real influence, that the benefit is often only temporary. The *rationale* of this success is connected, we imagine, with the remarks just now made, that many cases of epilepsy depend on a local affection of the bones or membranes which the remedy removes by its absorbent powers.

Not that we can prove the existence of any such cause in most instances, but knowing the value of the medicine where such cases do exist, we have explained its *modus operandi* by its selecting out these cases for cure. That epilepsy may exist for years, and only at death a local cause be found, we know from several instances, and in such there has been no difficulty in discovering a history of injury at an early period of life. Another explanation for an occasional cure by this remedy may be found in the fact, that fits arise sometimes from lead poisoning; and that the iodide or bromide of potassium is instrumental in eliminating the poisonous metal from the system. In two or three cases we have seen epileptiform fits arising from lead poisoning, and in which iodide of potassium was used with success. In this way it may sometimes have been supposed to have cured epilepsy.

Knowing how apt we are to be deceived

by the operation of a new remedy, I do not speak more peremptorily on the subject, but add a few cases; only stating that I continue to use it in all new cases which come before me, believing it to be wise to adopt some such remedy in the first instance.

*Case 1.* Cecilia D., aged 22, came to the Hospital in April, 1860. Her mother accompanied her, as she was unable to find her way and was childish in her manners. The former, indeed, never left her night nor day, as she generally had two or three fits a day. They had existed many years, but for two years had occurred daily. She had more than once fallen into the fire and burned herself. She was ordered five grains of bromide of potassium three times a day. The fits soon began to grow less in number, but the improvement was not very marked until her visit on June 6, when she had had no fit for three days, and in the following week, the 13th, had had none. After this they occurred at long intervals. She persisted in the medicine, with the exception of a week or two, and the report was, on October 24, "No sign of a fit for two months." At the end of another month, there having been no attack and her health improved, she ceased to attend. On February 13, 1861, she came again to the Hospital; she had remained well ever since (nearly six months) until a few days before, when, having lost a brother suddenly, she was seized with four fits in succession. She commenced the same medicine again and persisted in it for six weeks, until her letter was out, when, having had no return of the fits, she was dismissed. This girl thus not only lost her fits, but became more robust and in better health, a fact, Dr. Wilks said, he has noticed in similar cases, that as the disease recedes so does the health improve. In this particular case it might be thought that with such a striking result some syphilitic taint was present, but none such was discoverable.

*Case 2.* Amy M., aged 13, came as out-patient with fits in March, 1860. She took bromide of potassium in three grain doses, and the fits soon ceased. At the end of three months none having occurred, she left. This case is unsatisfactory as a long interval sometimes intervenes between the attacks.

*Case 3.* Alfred C., aged 36, a worker-in-lead, came to the Hospital on June 13, 1860. He was a very feeble man, and had

a remarkably sallow or waxy complexion, and had a blue line on the gums. He had fits and some hesitation in his speech. He took the iodide in three-grain doses, and left at the end of two months in much better health, and with a cessation of the fits.

*Case 4.* Francis K., aged 34. For two years he had been subject to fits. At first they appeared at long intervals; afterwards, about once a month, subsequently, about twice a week. He stated that he fell without any notice, and struggled violently. He was ordered the bromide, and when he left, in December, 1860, he had had none for ten weeks. He was seen some weeks afterwards, and he stated that he had had a slight warning twice, but never a decided paroxysm.

*Case 5.* Louisa C., aged 54, came to the Hospital on November 21, 1860. She had been subject to fits for about a year; and of late had had several a day. Ordered four grains of the bromide. On January 2, she had had on an average about one fit a week. On January 16, had had two fits. She had none after this until she left, at the end of February. Several months afterwards Dr. Wilks saw this patient, and she had had no symptom of a seizure, and then it seemed, on whatever cause they were dependent, that she was absolutely cured.

*Case 6.* Agnes J., aged 26, came to the Hospital on November 14, 1860. She had had fits ever since ten years of age, and on an average had had one a week. Of late they had been more frequent, and having had four in ten days, she applied for advice. She was ordered three grains of the bromide three times a day. The fits soon began to decrease in frequency, and when she left in January she had none for a fortnight. This case is unsatisfactory.

*Case 7.* Martha L., aged 29. She came on December 19, 1860. She was said to have had fits only for eight weeks, which as far as could be learned, appeared to be truly epileptic. She had had nine in the week previous. She was ordered the bromide. She had only one fit since, on January 9. They then ceased altogether, and when she gave up her letter at the end of the month had no return. This case also is unsatisfactory.

*Case 8.* Henry Y., aged 40. He came to the Hospital in September, 1860. He had fits daily, sometimes two or three a day. He was ordered three grains of the bromide

three times daily. This patient, after a time, improved considerably, but being an old case, the medicine was persisted in. At the expiration of four months, in January, 1861, he had had only eight fits since the commencement of the medicine, and had had none for three weeks. He continued until the end of the month, when, having no return of the fits, he gave up his letter.

*Case 9.* Jane E., aged 22. She came to the Hospital on December 19, 1860. She had had fits for a year, and at various intervals, sometimes two or three a week. She took the bromide for two months, and then gave up her letter, having had no fit during this time, and only on one occasion symptoms of one. This case also is unsatisfactory.

*Case 10.* Valentine M., aged 7. This was a very bad case of epilepsy. He had had several fits daily for the last three months. He took the bromide for three weeks with no improvement, afterwards zinc, and other remedies, but without success. He then desisted from all medicine. In the course of a week or two the fits spontaneously ceased, and three months afterwards he had only had slight symptoms. Unsatisfactory as regards the bromide.

*Case 11.* Charles S., aged 10. He had suffered from fits for two years. They sometimes occurred daily, but occasionally at a week's interval. On one occasion he was free for two months. Before coming to the Hospital he was much worse. Ordered the bromide, which he continued for three months, when, having none after the first fortnight, he ceased to attend.

*Case 12.* George F., aged 19. His fits commenced two years ago. Generally they occurred daily for several days, and then ceased for a few days. Ordered the bromide. This young man continued under notice for several months, and was upon the whole considerably better, though the fits occurred occasionally. When last seen had had none for more than two months.

The following case lately occurred in the Hospital:—

*Case 13.* John S., aged 33, was admitted on June 5, 1861, for epilepsy. He was at the same time very cachectic; he was thin, and his mind was dull. He said he had had fits for one year and a half. He had had pain in the head. He was too feeble to rise from his bed, and at a few days' intervals had epileptic attacks of a very severe

character. He had various treatment until August, when he was much worse; had seven fits in one day, and in the intervals was delirious. He was then ordered ten grains of the iodide of potassium three times a day, and at once began to improve. The fits left him; he became stronger and stouter, and left his bed. He continued the treatment for two months, when he left the Hospital, comparatively well.—*Med. Times and Gaz.*, Dec. 21, 1861.

#### HOSPITAL NOTES AND GLEANINGS.

*Fracture of the Neck of the Femur, the patient afterwards able to walk over a mile without assistance.*—A man, aged 60, was admitted into the Northampton Infirmary November 7, 1858, having been knocked down by a cart, about sixteen hours before, while walking along a narrow lane. He stated that he received his injury, not by the cart-wheel striking him, but by the subsequent fall, and he pointed out the trochanter major as the part upon which he fell. After the accident he got up, and, without assistance, contrived, though with much pain and difficulty, to walk a distance of rather more than a mile towards home. He was then seen by a surgeon, who informed him that his thigh was broken, and advised his removal to the hospital. On admission, the upper part of the right thigh, including the groin, was much swollen and ecchymosed, and a good deal of pain was complained of when the parts were manipulated. The limb could be freely moved in all directions; it was shortened rather more than an inch with the foot everted. When the limb was extended to its proper length and rotated, bony crepitus was detected with the greatest facility, and the trochanter moved freely in rotation of the limb. The anterior superior spinous process of the ilium and the trochanter major were unduly approximated, the distance between them being fully an inch less than on the opposite side. He was unable or unwilling to raise the limb from the bed, but said that he thought himself capable of doing so if not prevented by pain. His leg was carefully placed on the long straight splint, and at the end of the fifth week he could raise the foot several inches from the bed, and complained of but little pain when the limb was rotated. Crepitus, however, was distinctly perceptible. The splint was reapplied, and kept on till the end

of the ninth week, but on removing it, crepitus was still detectable on free rotation of the limb. A gutta-percha splint was then applied, and he was allowed to go on crutches for another fortnight, when he was discharged. The limb remained shortened about one inch and a half, the foot everted, and some little crepitus was readily discoverable when the limb was freely moved. He has since been reported as remaining permanently lame.

*Dislocation Backwards of the Left Hip; Reduction by Manipulation without Chloroform.*—Mr. V. JACKSON relates (*Brit. Med. Jour.*, Nov. 23, 1861) the case of a collier, aged 32, admitted into the South Staffordshire General Hospital May 31, 1861. Just two hours previous to admission, the patient, whilst working in a coal-pit, received a large piece of earth on his back; he was immediately forced down, and he found himself unable to move. The patient is a very tall man, six feet two inches in height, and of average muscular development.

After carefully examining the left hip, it was evident that the head of the femur was dislocated backwards. I had the man placed on his back on a strong bed, and then steadied by an assistant. I now seized the left leg just above the ankle, and flexed it on the thigh, and the thigh on the abdomen; the thigh was then well abducted with the left hand, the leg at the same time being well turned inwards. Immediately, a loud snap assured me that the reduction was effected, and replacing the limb on a couch, it was clear that the head of the femur had returned to the acetabulum. A long splint was, for a short time, applied to the limb, and the man was soon enabled to be discharged.

*Excision of the Knee-joint.*—Wm. B., aged 11, was admitted into St. George's Hospital in Feb. 1861, having four months previously been struck by a stone, behind, and about two inches above the left knee-joint. He did not feel much pain at the time; but the following day the joint became painful and swollen, and thus it remained up to the time of his admission; at which time, in addition to the general swelling of the joint, there was great pain, and that more especially over the inner side of the head of the tibia. No fluctuation

could be felt; but there was great tenderness on pressure in this region; and the limb started very much at night. The movements of the joints were considerably impeded, both as to extension and flexion. The constitutional symptoms were very severe. A generous diet was given, and a ham-splint was applied, and cold lotion to the knee. From this time, notwithstanding all treatment, the disease of the joint progressed slowly but surely. Suppuration made its appearance. Various abscesses were opened at different times. Matters went on from bad to worse, and a consultation was held; at which it was determined that the joint should be excised, as the boy's general health was beginning to suffer from the long continued drain.

The operation was performed by Mr. Hewett on July 25th. A semilunar incision having been made from the inner to the outer side of the joint, the soft parts were dissected upwards, the patella was then cut away, the lateral ligaments freely divided, and the condyles of the femur thrust forwards; the diseased parts were then removed with a common saw, care being taken not to injure the epiphysal cartilage. The condyles of the tibia were dealt with in the same way; after which, the cut surfaces of the bones were without much difficulty placed in good apposition, the soft parts being brought together with sutures, and the limb put into one of Matthews' swinging splints. During the whole of the operation but one artery required a ligature.

The examination of the parts which had been removed, showed extensive disease; the synovial membrane throughout being thickened and pulpy; the cartilages in many places eaten away by ulceration; and the bony structure softened, vascular, and infiltrated with strumous deposit.

The day after the operation, the boy's countenance was much improved; he had had a much better night than for some time past; and had suffered very little pain; and, altogether, was going on as comfortably as possible. He was ordered a liberal diet and some wine. Henceforth, the boy's general health improved rapidly; consolidation of the parts went on steadily; and he was discharged from the hospital on October 29th, three months after the operation, with solid union between the ends of the bones, and the operation-wound entirely

healed; but the two old wounds, which had been made in order to evacuate pus before the operation, and which seemed to be connected with carious bone, still discharged a little.

On his leaving the hospital, there was only an inch and a half difference in length between the two limbs.—*Brit. Med. Jour.*, Nov. 23, 1861.

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*Wound by a Hatchet penetrating the Knee-joint—Recovery.*—A man was admitted into St. Bartholomew's Hospital, Oct. 19, 1860, having two days previously accidentally hit his knee with a hatchet. The joint was swollen and painful, and there was a small wound about half an inch long, on the outer side, made evidently by the sharp corner of the hatchet. He stated that he had lost a good deal of blood at the time. He was ordered milk diet. Eighteen leeches were put around the patella, and a large poultice afterwards applied. He felt greatly relieved the next day, but there was still a great deal of pain; he therefore had twelve more leeches on; they bled freely, and he was greatly eased. He did not sleep well, and being very restless, opium was given at night for the first week.

After he had been in the hospital a few days, it was quite evident that the joint was opened (as there was a discharge of synovia), and that there was suppuration in the joint, by the discharge of pus. The limb was put on a splint and kept quiet. Opium was given at night for a few nights longer, and a little aperient medicine. All went on quite satisfactory, the swelling about the knee getting smaller and less painful, and the discharge gradually diminishing. In the fourth week the discharge ceased, and a few days afterwards the wound quite healed. The limb was put on a pillow; the patella moved freely; and on moving the limb a preternatural mobility of the joints, from relaxation of the ligaments, was observed. The leg and knee-joint were covered with a firm case of gum and chalk, and the boy was ordered up. In a few days he managed to walk about pretty well, but complained of his knee aching if he walked much. He left the Hospital on December 30, the gum and chalk having previously been taken off to see the state of the joint. There was still some swelling of the joint, though it was less; there was more mobility than should be. He stated that it felt as strong

as ever when it was cased up. It was again put up in gum and chalk, and he left the hospital in the tenth week after admission. —*Med. Times and Gaz.*, August 31, 1861.

*Stone in the Bladder crushed on three occasions; patient cured within three weeks.*—In the metropolitan hospitals, vesical calculi are commonly removed by lithotomy, when the patients are young, for in such cases the result of this operation is almost invariably successful. In a very few instances a preference has been given to crushing, but it is highly improbable that this mode of practice will ever become the rule in very young children. In the middle period of life, on the other hand, where the size and nature of the stone are favourable, lithotripsy has proved very successful. It is also occasionally performed on aged persons whose condition of bodily health may be otherwise suitable.

It is laid down as a rule by many surgical writers that a small stone is more favourable for crushing than a large one, and what is understood by the former term, is a stone within the diameter of an inch. The calculus in Mr. Coulson's patient came under this class, and as the condition of the urinary organs generally was unexceptionable, lithotripsy was performed on three occasions, with the most satisfactory result, the fragments being completely got rid of, and the patient discharged from the hospital within three weeks, a period remarkably short, when contrasted with that usually attending lithotomy.

An interesting point in the case is the passage of two fragments of the stone, of the size of hazel-nuts, a week after the first crushing; the interval between the first and third crushing was nine days. No bleeding ensued after any of the operations, nor was there any pain. Chloroform was not given, as Mr. Coulson considers that the sensations of the patient are the best guide to the operator.

John B—, aged fifty-one, married, was admitted into St. Mary's Hospital, on Oct. 18th, 1861, with symptoms of stone in the bladder. He states that, about two years ago he suffered considerable pain in the left renal region, which soon left him. About nine months back, however, the pain recurred, and soon afterwards he began to experience uneasy symptoms whilst voiding his urine. The urine used to flow in a good

stream, but frequently stopped suddenly. After micturition, he experienced pain in the penis, especially at the glans, and a considerable amount of smarting in the urethra. On his admission, he stated that he had a frequent desire to micturate, and the flow of urine often stopped suddenly. He was able to micturate better when lying down than when in the erect posture. On introducing a sound into the bladder, a calculus of moderate size could be distinctly felt, which was crushed by Mr. Coulson, on the 23d of October. The operation was conducted as follows:—A catheter was introduced, and four ounces of lukewarm water were then injected into the bladder, the patient being in the recumbent position, with the pelvis and shoulders raised. Weiss's lithotritus was introduced, and the stone easily crushed. The patient was put to bed, and ordered thirty minims of tincture of opium.

*October 24th.* Has had two shivering fits, one last night and another this morning; hot water applied to his feet. He was ordered twenty minims of tincture of henbane every four hours.

*25th.* Passed a good night; can void his urine more freely, and without much smarting. The urine contains a small quantity of lithic acid detritus.

*27th.* Feels an inclination to pass urine about every two hours. The act of micturition is still accompanied with a good deal of smarting, but the pain in the penis is much decreased; has had no return of shivering; the urine is high-colored, and has a strong ammoniacal odour; appetite bad; does not sleep well.

*29th.* Passed a much better night; does not experience a desire to void urine so often, and the smarting after micturition has somewhat decreased; good deal of detritus passed.

*30th.* Slept well again last night. At ten o'clock this morning he passed a piece of lithic acid calculus, about the size of a hazel-nut, and at twelve o'clock another piece about the same size. Has had no more shivering. Passes his urine about every four hours; has very little smarting now, and no pain. At two o'clock Mr. Coulson again crushed the stone, proceeding in the same manner as on the 23d inst.

*31st.* Slept tolerably well last night, but has had slight shivering. Passed two more small pieces of stone this morning, and a good deal of fine detritus. Complains of



much smarting during and after the passage of the fragments along the urethra.

November 1st. Did not sleep quite so well last night. Passed more detritus, but no pieces of any size. Voids his urine every six hours. The stream of urine is good, but the act of micturition is accompanied by a great deal of smarting; the urine is not so highly coloured as it has been. Appetite improved; bowels open regularly.

2d. Slept rather better last night; has only passed urine twice during the last eighteen hours. Still complains of the pain in his penis, and of smarting after the act of micturition. The urine is not so high-coloured, and has not such a strong odour as formerly. At two o'clock to-day Mr. Maurice, the house-surgeon, crushed the remaining fragments of the calculus. The operation was conducted as before, and the patient experienced no inconvenience from it.

4th. Got up for two hours this afternoon, but feels weak. Passed several pieces of stone yesterday, one of them being about the size of a small bean.

6th. Has passed nothing more since the 3d inst. Voids urine freely about every six hours, without much smarting. Is in no pain, and feels much stronger. The colour of the urine is natural, and it has entirely lost the ammoniacal odour. Sleeps well; appetite much improved.

In a week from this time the bladder was carefully examined by Mr. Coulson, to ascertain if any portion of stone remained. It was found quite free, and in a few days afterwards the patient was discharged cured.

In this case all the indications favourable for lithotomy were present. The urethra and prostate were healthy, and the bladder could easily retain six or more ounces of urine. Moreover the stone was small.—*Lancet*, Dec. 14, 1861.

*Removal of a large piece of Iron from the Eye where it had remained for four years.*

—Mr. V. JACKSON relates the following case: S. H., aged 16, was brought to the South Staffordshire General Hospital, Wolverhampton, Oct. 10, 1861. His father said that for the last week he had been complaining of pain in both eyes, but especially the right. I was also informed by the parent that, four years since, whilst engaged in a manufactory, he suddenly received a blow on the right eye, and from that time had lost the sight in it. Imme-

diately after the accident, he was seen by a medical man. No minute exploration of the eye was made. He continued under medical care for some time; but deriving little benefit, he discontinued it. From the time of the injury up to the period when I saw him, there had been constant pain in the right eye, as well as over the brow. A slight purulent discharge had also been noticed from it. Latterly, the left eye had become weak and painful at times, and it was especially on this account that I saw him. On opening the lids of the right eye, I saw a granulating projecting surface, with a central depression, and suspecting the nature of the case, I fixed the lids apart with the wire-speculum, and then passed a probe into the depression; its point quickly struck against a hard body, and this, after a little trouble, I extracted. It consisted of an almond-shaped rough piece of iron, weighing twenty-six grains, and measuring in length seven-eighths and in breadth three-eighths of an inch. Very little irritation followed its removal; and the boy was discharged cured in a very short time.

REMARKS.—At the time of the accident, I suppose, the projectile must have penetrated the eye deeply, and probably lodged in the vitreous body, and behind the eye; at all events, it must have been beyond the curtain of the iris, or it would have been seen on examination. I think the case is a very good illustration of the line of practice required; for the persistence of the pain, and the continuance of purulent discharge, combined with an evident cleft in the disorganized eye, could lead to no other conclusion than that some foreign body or substance was the cause of it, and that, considering the photophobia and increasing asthenopia in the left eye, the sooner such foreign substance was removed the better.—*Brit. Med. Jour.*, Nov. 23.

*Fracture of the Pelvis with Laceration of the Urethra; Recovery.*—A. G., aged 8, was admitted into the Great Northern Hospital on July 24th of this year, having just been knocked down by a distiller's cart, loaded with barrels, the wheels of which passed across the lower part of his abdomen.

On his admission, he was much collapsed, and complained of great pain about the lower part of his back, which was aggravated by the slightest movements of either

his legs or body; indeed, on account of the pain, he was unable to raise either leg from the bed. A dark broad mark indicated the parts over which the wheels had passed. A severe contusion extended from the top of the left ilium obliquely across the abdomen to the left groin, following the line of Poupart's ligament. The perineum was also contused, and darkened with effused blood.

July 25th. He has passed a fair night owing to the opiate he had, but complains of great pain. He has passed no urine since his admission. His bladder being full, and distended as far upwards as the umbilicus. Mr. Lawson endeavoured to pass a catheter; but as it neared the membranous portion of the urethra, it passed out of the track, and could be felt with the finger in the rectum, running along the upper surface of the bowel. The boy was then put under the influence of chloroform, to allow of a more thorough examination being made. With one hand placed over the pubes, whilst the leg was rotated, a distinct crepitus was detected. Another attempt was made to pass the catheter; and, after some difficulty, Mr. Lawson succeeded in putting a silver one into the bladder, which he fastened in by tapes.

July 26th. He was doing well. A gum-elastic catheter was passed to-day, as the lad had drawn the silver one out in the night. The bladder was quite paralyzed, and the urine would only flow through the catheter, when pressure with the hand was applied above the pubes. On this account, a long India-rubber tube was connected with the end of the catheter, and carried over the side of the bed into a chamber-pot, so as to form a siphon and thus keep the bladder empty.

From this time, the boy progressed uninterruptedly towards recovery, and was discharged from the hospital on August 20th to attend as an out-patient. He was able to walk about, and had complete command over his bladder.—*British Med. Journ.*, Nov. 2, 1861.

*Seven Examples of Ovarian Tumours, in six of which Ovariectomy was successful.*—The subject of one of the following cases, a woman under twenty-three years of age, expressed an anxiety as to the possibility of her having a family in the event of marriage at a subsequent period. In relation to

this she was assured there was not the slightest obstacle in her case to the accomplishment of such a result. We have met with instances of pregnancy after ovariectomy, and without any inconvenience to the mother or the child; and we have heard Mr. BAKER BROWN state that in one of his first cases the patient had borne four children after the operation.

Although an unusual circumstance, pregnancy does arise sometimes where an ovarian tumour is present. Such an occurrence is recorded in our pages by Dr. Hunter, of Manchester (*vide The Lancet*, vol. i. 1861, p. 83); and, what is of remarkable interest in connection with it, the cyst evacuated itself by the bowel. The case of Dr. Davies, in our present series, is an illustration of pregnancy supervening upon ovarian disease, terminating, at the full period, in the birth of a child (now living), with persistence of the ovarian disease in the mother.

The seven following cases make a total of sixteen operations for ovariectomy performed at the London Surgical Home; of which number twelve have been successful. The great success here obtained, we think, has to some extent depended upon the course of preparatory treatment which the patients underwent, consisting of warm baths twice a week for three weeks prior to operative measures, and the administration of a combination of the tincture of arnica and muriated tincture of iron during the same period, with attention to the general health.

**CASE 1. Unilocular Tumour.**—L. H.—, aged twenty-one, single, admitted August 29th, 1861. She has had the tumour two years; has been tapped twice, the last time four gallons of clear fluid being drawn off. Operated upon on September 19th. The tumour was devoid of adhesions, and was easily drawn out. The pedicle was secured by a clamp, which was removed on the third day, and the pedicle allowed to return. The patient never had a bad symptom, had only one grain of opium, and left the Home Oct. 31, cured. The tumour was unilocular.

**CASE 2. Polycystic Tumour.**—F. W.—, aged nineteen, admitted October 7, 1861. Has had the tumour two years. She came here as a kitchen-maid, when it was first discovered in conversation with the nurse. Operation performed on October 24th. The tumour was devoid of adhesions, and the pedicle treated as in Case 1. Two grains of opium were given, and she did well without

a bad symptom, and will soon leave the Home. The tumour was multilocular, but chiefly composed of one large cyst, containing fourteen pints of fluid, which with the solid matter weighed about twenty pounds.

**CASE 3. Polycystic Tumour.**—C. S.—, aged forty-nine, married, admitted September 9, 1861. She has had the tumour six years; has been twice tapped, once by Mr. Birkett, the second time on September 12, when twenty-five pints of dark-brown, coffee-coloured fluid of thick consistence were drawn off. She was operated upon on October 31. There was some adhesion in the direction of the liver, which was secured with a ligature of Indian hemp, and several other slight adhesions, which were easily broken down. The pedicle was treated as in Case 1. The patient did pretty well till November 2d, when peritonitis seemed coming on. This, however, succumbed to treatment, and she is now convalescent. She had five grains of opium. The tumour was multilocular, and composed of two large cysts with very thin walls, containing eleven or twelve pints of fluid and several masses of solid cysts, varying in size from that of a walnut to an orange.

**CASE 4. Polycystic Tumour.**—M. A. M.—, aged fifty, married, admitted October 14, 1861; is the mother of six children, of rather a worn constitution, and of a desponding temperament. Has had the tumour three years; never been tapped. Operated upon on the 31st of October. There were no adhesions in front, but there was one in the direction of the liver, and it was also attached to the whole surface of the fundus of the uterus. There was great difficulty in extracting the tumour—firstly, because it was of the nature of honey-comb cysts, and although pierced in several places hardly any fluid escaped; and secondly, because the tumour had modelled itself to the cavity of the pelvis. The pedicle was so large that it had to be divided into five separate portions, one of which was secured by a clamp, and the others each by a double ligature. All these were retained outside. The patient had three grains of opium, but never rallied, and sank forty hours after the operation. The tumour weighed 6 lbs. 14½ oz., and the surface from which the pedicle had been cut off measured 5½ inches by 3 inches. The autopsy showed partial general peritonitis, the pedicle was covered with clots, and there was some blood in the peri-

toneum. The liver, heart, &c., were healthy, and full of blood. Nothing was found sufficient to account for death. Patient evidently died from shock.

**CASE 5. Unilocular Tumour.**—M. T.—, aged twenty-three, single, admitted October 16, 1861. Has had the tumour two years. Operated on October 31st. No adhesions; pedicle treated as in Case 1. Had one grain of opium, and never a bad symptom; is now quite convalescent. The tumour weighed nearly a pound, one large cyst containing twenty-three pints of perfectly clear colourless fluid. On the internal surface were studded thousands of smaller cysts.

**CASE 6. Polycystic Tumour.**—S. D.—, aged twenty-seven, single, admitted October 15, 1861. Has had the tumour fifteen months. Was tapped last June by Dr. Braxton Hicks, who drew off seventeen pints of fluid; tapped a second time by Mr. Brown, who drew off thirty-three pints of fluid. She then measured forty-five inches around the umbilicus. Operated on November 14th. The adhesions were so powerful that the cyst was cut through in the third incision, which was made in the linea alba. One band of adhesions was ligatured; the pedicle secured with a clamp, and treated as in Case 1. The tumour was very multilocular, weighed 7 lbs. 2 oz., and contained twenty-two pints of fluid. She has never had a bad symptom; neither a grain of opium nor any other medicine was required. The wound was perfectly healed in a week.

**CASE 7. Polycystic Tumour.**—K. E. S.—, aged eighteen years, admitted October 28, 1861. Has observed the tumour between three and four months. Has not menstruated for eight months. Has never been tapped. Operated on November 21. On making the median incision, a piece of the descending colon presented itself in front and at the lower part of the tumour, and was adherent to the abdominal parietes. The adhesions were very powerful and extensive. The uterus was much drawn up, and intimately connected with the pedicle, which was inordinately long and thick; and in cutting off the latter after it had been secured by the clamp, a small portion of the right corner of the uterus was snipped. This bled profusely, and the wound had to be secured by six small silver sutures. The general hemorrhage was unusually great.

Up to the present time (November 28) the patient has not had a bad symptom, and three grains of opium have been administered.—*Lancet*, November 30, 1861.

## MEDICAL NEWS.

### DOMESTIC INTELLIGENCE.

*Importance of the Position of Animals under the Effects of Ether.*—Dr. C. T. JACKSON urges (*Boston Med. and Surg. Journ.*, Jan. 16, 1862), the importance of position in the administration of anæsthetics. He states that in conversation with Dr. A. B. WILTON, a very intelligent Veterinary Surgeon of Dorchester, the latter stated "that if a horse is etherized and laid on his back, with his nose up, he will certainly die, owing to the falling back of the tongue, and the consequent pressing down of the epiglottis, so as to produce suffocation. He mentioned four instances, in which he had witnessed the death of horses, during the operation of castration, from the effects of ether and the above-named position. His experience with ether had also proved that death from it never takes place if the horse is laid on his side, with his nose horizontal. His experience has also been extended to the etherization of cows, particularly in cases where mechanical aid was required in removal of the calf, and he has never lost one of them from the effects of ether. When he has had occasion to kill useless horses or dogs, he has made use of ether, aided by the position named, and he says that they die easily, without a struggle—asphyxia resulting from closing of the glottis during the anæsthetic state. These facts corroborate those observed on the human subject by Dr. Petrie, of Liverpool.

*Sophisticated Precipitated Carbonate of Iron.*—Mr. W. H. PILE has met with a lot of precipitated carbonate of iron adulterated with 42 per cent of foreign matter. He states in a note (*American Journ. Pharm.*, January, 1862), that "In preparing muriated tincture of iron recently, I was much annoyed at the insolubility of the precipitated carbonate of iron, a new lot which I had just received. After a prolonged digestion of three ounces for five or six hours with the requisite amount of muriatic acid, I added an additional quantity of acid and continued the digestion several hours more.

A large amount apparently remained undissolved; allowing this to settle, and pouring off the clear solution, I threw the bulky sediment on a filter, and washed with water thoroughly. When dried, it resembled white clay, and weighed 1½ oz., which represents this moderate adulteration as 42 per cent. of the whole weight. But this was not all: upon evaporating the acid solution, together with the wash waters of the sediment, it became incrustrated over with a crystalline mass; pouring off the now concentrated solution, and washing the crystals with cold water and drying, I obtained a further adulteration of eighty grains, or nearly six per cent. of fine silky crystals, white, and resembling sulphate of quinine. Subjecting these impurities to appropriate tests, it is evident that the first mentioned insoluble residue is alumina, while the crystals are hydrated sulphate of lime deposited from the hot solution.

Can you inform us, Mr. Editor, by what ingenious process this lot of precipitated carbonate of iron has been manufactured? for I imagine the whole compound has been thrown down together by some unscrupulous chemist, who was more concerned about the quantity than the quality of the article."

*Re-organization of the Medical Department of the United States Army.*—A bill has been introduced by Senator Wilson for the entire re-organization of the Medical Department of the United States Army. This bill, with slight modifications, will, should it become a law, elevate the military rank of the higher Medical officers, secure to the service a hospital and sanitary administration, which is now greatly needed, add much to the efficiency of the medical corps, tend to protect the health of officers and soldiers and to secure to them, when sick or wounded, better attention and greater comforts; and thus materially contribute to the efficiency of the army, which is so materially dependent upon the health and physical vigour of those who compose it.

*Chicago Branch of the Sanitary Commission.*—It is stated in the *Chicago Medical Examiner*, Dec. 1861, that the Chicago Branch of the Sanitary Commission "has furnished all the hospitals at Cairo with clothing, bedding, food, and miscellaneous articles, and has in store at that place, 120 boxes more, in reserve for an emergency.

It has also supplied the hospitals at Rolla, Sedalia, Tipton, Otterville and Bird's Point, Mo., Paducah, Ky., Mound City, Ill., and Ft. Leavenworth, Kansas. Some fifteen large boxes of these goods are daily received from all parts of the State, and from twelve to fifteen dispatched to the various points above mentioned. Through its instrumentality much good has been done in the various camps, in enforcing sanitary and police regulations, in seeing to the rations and modes of cooking, etc., aside from the more strictly medical province, in which much has been done in the way of weeding out irregular practitioners, instituting order, cleanliness and discipline, and otherwise ameliorating the condition alike of the sick and well.

*Sanitary Condition of New York.*—New York presents to the world the singular spectacle of a great city, aspiring to supremacy in population, wealth, and intelligence, yet regarding with indifference those blighting influences which delay her progress, and tend powerfully to thwart her ambition. The annual devastation of her people by loathsome diseases which she can easily prevent, the disgust which her filthy streets create in every visitor, and her fearful system of packing the labouring classes in unventilated tenement houses, give her no alarm. Heedless of her own happiness, of the good opinion of men, and of the fearful evils which afflict her population, she rushes madly towards the goal which she is destined to win only at the hazard of every interest of justice and humanity.

It seems incredible that an intelligent and Christian city could witness the annual decimation of its people by preventable diseases without putting forth every honourable exertion to apply the remedy. Yet such, in its municipal capacity, is the conduct of New York. In 1860, by careful computation, this city lost 10,496 of its inhabitants by diseases that either do not exist in the most salubrious districts, or exist only in a modified and not fatal form. The hearts of the people are wrung with anguish when a score or two of lives are sacrificed on an ill-conceived battle-field; the commanding officer is suspended from command; a military commission inquires into the minute details of his plans, and if it proves him incompetent he is dismissed

from service. But New York, calmly indifferent, witnesses the annual slaughter of more of her citizens than occurs in a hundred destructive battles; no official is hurled with popular indignation from power; no searching inquiry is made for the causes of this costly sacrifice to official incompetency and neglect; but quietly the new year succeeds the old, and begins its chronicles of the same waste of human life.—*American Med. Times*, Jan. 11, 1862.

*American Pharmacopœia.*—We understand that the revision of this work is in an advanced state of progress, and that the committee having it in charge are making every effort to have it ready to put to press at an early day.

*Salting Railroad Tracks.*—The practice of salting the streets of New York after every snow storm, to hasten the melting of the snow, is now forbidden by law. While it was practised, the streets were not only ankle deep with water, but this water was rendered intensely cold by the mixture of salt. Great injury resulted to the hoofs which travelled on these streets, many losing their horses as a result of the constant exposure. Children attending the public schools were very liable to have their shoes saturated with this brine, and severe colds were the consequence. As a sanitary measure, this action of the Common Council is worthy of all imitation.—*American Med. Times*, Jan. 25, 1862.

*Pacific Medical and Surgical Journal.*—Dr. DAVID WOOSTER, the editor of this Journal, having been appointed Surgeon and Medical Director in the U. S. Army for the Department of the Pacific, has vacated the editorial chair, which has been assumed by Dr. JAMES BLAKE, a practitioner of considerable acquirements, and who has for the last ten years been a resident of California, and been an able contributor to its medical literature.

*Eight Children at a Birth.*—The following wonderful story has been going the rounds of the daily papers.—“On the 2d of August, Mrs. Timothy Bradlee, of Trumbull County, Ohio, gave birth to eight children—three boys and five girls. They are all living, and are healthy, but quite small. Mr. Bradlee's family is increasing fast.

He was married six years ago to Eunice Mowery, who weighed 273 pounds on the day of her marriage. She has given birth to two pairs of twins: and now eight more, making twelve children in six years. It seems strange, but nevertheless is true, Mrs. Bradlee was a twin of three, her mother and father both being twins, and her grandmother the mother of five pairs of twins. Mrs. Bradlee has named her boys after noted and distinguished men; one after the Hon. J. R. Giddings, who has given her a splendid gold medal; one after the Rev. Hon. Elijah Champlain, who gave her a deed of fifty acres of land, and the other after James Johnson, who gave her a cow."—*Letter in New York Tribune.*

*Ohio Medical and Surgical Journal.*—This Journal will in future be edited by the Faculty of Starling Medical College. The business department has been assigned to Prof. T. G. WORMLEY, who is now the publisher, and to him all business communications must be addressed.

#### FOREIGN INTELLIGENCE.

*Epidemic Measles at Val de Grace.*—Professor LAVERAN furnishes this narration as a specimen of the injurious effects which nosocomial influences exert upon otherwise benign affections. The return of troops from the Italian war had the effect of producing great accumulation of troops in the military hospitals. From July, 1859, to July, 1860, there were admitted into Val de Grace no less than 10,000 patients. An epidemic of measles commenced in the winter of 1858-59, and abated in the summer to break out with increased force in the following winter. The result was, that of 125 patients attacked in 1860 the large number of 40 died, being 116 per 1000 of the general mortality for the year. The patients were between 19 and 28 years of age. The disease at its outset presented no signs of unusual gravity, and was unaccompanied by complications such as hemorrhages, typhoid symptoms, meningitis, etc., which have been recorded by authors as sometimes accompanying epidemics. The more or less confluent eruption put on a very favourable appearance, and the fever was moderate; but in place of convalescence setting in as

the eruption declined, gastro-intestinal derangements of the cholera form appeared, usually accompanied by a slow asphyxia, due to an excess of bronchial mucus, or the production of a great number of "leucocysts" over the entire extent of the bronchial mucous membrane. A deficiency of power of reaction seemed to prevail, debility succeeding the fever, no appetite existing. Thus, without complications properly so called, the rubeola extended along the internal tegumentary membranes, after the manner of spreading erysipelas and serpiginous ulcers. Death in most of the fatal cases having resulted from asphyxia induced by bronchial super-secretion, the mucous membrane was found congested, and its epithelium destroyed, the calibre of the bronchi being enlarged. The pulmonary veins were remarkably distended, and the pulmonary vesicles, themselves filled with mucosities, and compressed by the distended veins and dilated bronchi, exhibited red and gray ramollissement, giving to the tissue of the organ a marbled appearance. Professor Laveran's observations in nowise favour the statement which has been made that rubeola hastens or favours the development of pulmonary tubercles. As to treatment of these cases, little was done; for antimony, so strongly recommended by Rilliet, was found to be only mischievous. Expectation and hygienic provisions were, therefore, alone resorted to. "If we consider febrile diseases in general," the author concludes with observing, "we find that some, as malarial diseases for example, are benefited by the very fact of residence within an Hospital, and are but little subjected to nosocomial influences. Others, again, and especially cholera, rubeola, and typhoid fever, become manifestly aggravated in an Hospital medium. In these three diseases the condition of the patient always becomes worse during the night, and in all three the respiration is manifestly affected—in rubeola by reason of the bronchial mucosities, in typhoid owing to the muscular inactivity, and in cholera through the condition of the blood. In these diseases it is of greater importance than in others to watch attentively that the ventilation shall be complete, and the other conditions of a good Hospital regimen be fulfilled."—*Med. Times and Gaz.*, Aug. 31, 1861, from *Gazette Hebdomadaire*, Nos. 2 and 4.



**Regeneration of Bone.**—DR. DEMAUX recently sent to the Academy of Sciences a paper containing fresh evidence of the regenerative powers of the periosteum in cases of injury to the facial bones. In one of the examples adduced, the patient, a young man of twenty-two, underwent in 1855 an operation for the removal of an enormous naso-pharyngeal polypus, the pressure of which on the palatine arch had caused the absorption of about two-thirds of an inch square of the bony roof of the mouth. Six years later—a few weeks back, Dr. Demeaux again examined this patient, and found that the whole of the missing osseous tissue had been replaced by periosteal regeneration, which in this case was spontaneous, and unprovoked by artificial means. A second instance is still more illustrative. In October, 1859, a young soldier returned to France after the Italian campaign. He had been wounded at Solferino by a musket-ball, which had fractured the left superior maxillary. The day after the battle the surgeon on duty extracted the projectile, together with several splinters of bone, in one of which three molars were firmly implanted. On examination, about half of the palatine roofing was found to be devoid of bone, the mucous membrane constituting the only wall of separation between the mouth and nose. In consequence of the want of solidity in the palate, the functions both of articulation and deglutition were impeded. During the summer of last year, when Dr. Demeaux again saw this man, the bony plate forming the roof of the mouth was found to be quite entire, and the impediment of speech and the inability to swallow had disappeared. The above examples are highly suggestive, and operative surgery will doubtless before long have turned to account the bone-making function of the submucous periosteum in the treatment of cases of congenital cleft palate.—*Lancet*, Dec. 21, 1861.

**Treatment of Deafness.**—DR. BONNAFONT has lately given to the public some details of his method of treating those forms of deafness in which much singing of the ear is present. His plan is to introduce through a Eustachian catheter the combined vapours of certain stimulant and volatilizable fluids by means of a small pump. The agents which he has found most useful have been ether (acetic), ammonia, chloroform, the

tinctures of camphor and benzoïn, and essence of peppermint. The peculiarity of his apparatus is, that the pump may be charged with the vapours of one or of all the medicinal fluids simultaneously; and it is to the association of certain of these agents that he considers many of his cures to be due. In nervous deafness, for example, he forces into the internal ear a volatilized mixture of ammonia and essence of peppermint—a stimulant, in fact; whereas for the prevention of nervous hyperæsthesia and singing, he finds the best effects to result from the combination of ether, chloroform, and camphor.—*Lancet*, Dec. 14, 1861.

**Cataract.**—DR. SPERINO states in a letter to the *Gaz. Med.*, of Turin, that he has succeeded in several cases in rendering the opaque lens transparent after a certain time, by daily evacuating the aqueous humour. He says that he will shortly publish his cases.

**Chylous Urine.**—In the Northern Hospital, Liverpool, under the care of Dr. Walters, there is at present a very interesting case of chylous urine. The patient, a man about 23 years of age, a native of Bermuda, sought admission a few weeks ago, in consequence of an unusual appearance in his urine, which came on suddenly a fortnight previously, without any apparent cause and unaccompanied by any sensible interruption to his usual health. He was passing from four to six pints of urine in twenty-four hours, which presented the exact appearance of new milk, and after standing, became more or less coagulated, so that small masses were formed resembling *blanc mange*; there was also a variable quantity of bright scarlet blood, forming a thin film at the bottom of the vessel. The specific gravity was about 1005. The precipitate was soluble in ether. The case was first taken into the surgical ward under Mr. Hakes, as the urethra had become obstructed by a coagulum, leading to the supposition that there was retention of urine. Since his transfer to the medical ward the treatment has consisted in rest in the recumbent posture, generous diet, with a small quantity of wine and gallic acid in full doses. The result has been, disappearance of blood from the urine, a considerable diminution in the amount of the peculiar milky precipitate, a decrease in the

specific gravity, and an improvement in the general health, the patient having steadily gained in flesh. I have no doubt Dr. Walters will publish a detailed account of the history and progress of this very obscure and remarkable case.—*Brit. Med. Jour.*, Nov. 30, 1861.

*New Method of Administering Chloroform.*—At a recent meeting of the Obstetrical Society, Dr. Simpson described a plan of administering chloroform which he has now adopted in preference to that at present in use here. The present mode is to fold up a handkerchief and pour into the hollow a quantity of chloroform, and then hold it at some distance from the face, so as to admit of atmospheric air being inhaled along with the vapour. The new plan is to lay a single layer of handkerchief over the face, and let the chloroform fall on it drop by drop. The advantages are these: 1. That there is less danger to the patient from the smaller quantity applied at a time. 2. That anaesthesia is more speedily produced. 3. That the quantity of chloroform required is less. Various gentlemen who had made trial of the plan confirmed the value of this process; and Dr. Young in particular stated that he had kept a patient narcotized for ten hours with two ounces and a half of chloroform.—*British Med. Journ.*

*Quantity of Phosphorus found in the Brain of Man and Animals.*—As the results of various chemical examinations, Prof. BORSA-RELLI arrives at the following conclusions: 1. The medium quantity of phosphorus found in the brain of man and some other animals, is more than triple that assigned to this organ by Persoz and Opermann. It varies from 1.352 to 1.790 per cent. 2. The phosphorus of the animal economy is found in largest quantity in the brain, in a less proportion in muscle, and in a still less proportion in the stomach. 3. In man, the quantity of phosphorus increases in a decided manner in proportion to his years in the brain and in the muscular flesh, and in a less marked manner in the stomach. 4. The less quantity of phosphorus found in individuals under puberty, whose development is not completed, arises from the greater quantity of this metalloïd required for the solid parts of the frame. 5. The difference in the quantity found in an adult or a person of advanced age, and an indivi-

dual under puberty, amounts for the brain to 1.14 compared to 1, and for the muscular substance to 2.19 as compared to 1. The amount of phosphorus found in the adult or aged person, and in the ox, the calf, the sheep, and the hog (with the exception of the flesh of this last), is very much the same—the average being, as regards the brain, 1.560 in man, and 1.553 in the animals; and as regards the muscular substance, 0.872 in the former, and 0.876 in the latter. In the hog, however, the flesh contains 1.012, being rich in phosphorus as compared with that of the other animals examined, as 1.15 to 1. This may be one of the reasons why the flesh of this animal is more stimulating than that of others. 7. Flesh by boiling in water loses one-half of its phosphorus; so that the flesh of the hog, which uncooked contains 1.012 per cent., after boiling only contains 0.567. Hence we see why in practice boiled meats are found to be most suitable for the convalescence of those who have suffered from hyperæsthenic diseases, and why roasted meats impart vigour to those whose strength has become exhausted by those of a debilitating character. The good effects of meat so cooked do not, however, solely arise from the presence of a greater proportion of phosphoric compounds. They also contain a larger quantity of the proper nutritive principles of the flesh, which being soluble in water, become lost in boiling.—*Ibid.*, from Omodei's *Annali Universali*.

*Poisoning by Coal-gas.*—A case of poisoning by coal-gas has recently been investigated before the borough-coroner, Liverpool. A man and his wife were found one morning in the cellar in which they lived, the former in a state of insensibility, and the latter quite dead. On inquiry, it was found that an escape of gas from the main had occurred, during some repairs in the street adjoining; the opening in the pipe had been "clayed up," as it is technically called; but, unfortunately, the gas escaped and followed the water-pipe until it emerged into the cellar where the unfortunate people were sleeping. I am told that accidents from the inhalation of gas are very liable to occur to the workmen employed about the pipes. When the escape is sudden and considerable, it has been known to produce death in a few minutes; but when, as happens more frequently, the men are exposed for a long time to the inhalation of the gas

largely diluted with air, it produces very remarkable effects—at first the individuals become excited, are quite unconscious of their danger, and cannot be convinced of the risk they are incurring, so much so, as to render it necessary to remove them by force. After a longer exposure, they lose the power of control over their limbs, fall down in a state of collapse, froth at the mouth, and have all the appearance of dying men; but even from this condition they frequently recover, and the antidote, which experience has taught them to place the greatest confidence in, consists in pouring down the individual's throat good bottled porter out of the bottle. Neither spirits nor draught porter, nor ale, are said to have the same good effect.

The sub-engineer of our gas company, a highly intelligent man, assures me that he has known many lives to have been apparently saved by the application of this antidote.—*Brit. Med. Jour.*, Nov. 30, 1861.

**Death from Artificial Flower Making.**—Some days ago an inquiry was held by Mr. G. S. Brent, on Matilda Scheurer, a good-looking girl of 19, who died from poison imbibed in the manufacture of Artificial flower-leaves. Mrs. Louisa Scheurer, mother of the deceased, deposed that on Thursday week her daughter was taken ill. She was seized with vomiting, and the refuse of the stomach was very greenish. The witness took her to a doctor on the following morning, who told her she was again suffering from the effects of poison. She had been ill several times before, complaining of pains in the stomach and sickness, for the last year and a half. She was engaged as an artificial florist in the warehouse of Mr. Bergerond, of Judd Street, Brunswick Square, and up to the time of her death she had been engaged in the leaf-making. She was in the greatest pain until she became insensible, when death put an end to her sufferings. Mr. Paul, surgeon of Burton Crescent, said he had attended the deceased four times within eighteen months, while suffering from the same causes. He had made a *post mortem* examination, and found that the lungs gave evidence of the presence of arsenite of copper, the liver being highly impregnated, as also the mesenteric glands. The cause of death was acute inflammation of the mucous membrane of the stomach, produced by the inhalation of the arsenite

of copper. A sister of the deceased had died under similar circumstances. Mr. Bergerond said he employed ninety-eight girls in his establishment, and for their protection he had suggested the wearing of masks, but it was objected to by them as producing excessive heat. They, however, wore muslin over their mouths. It was stated by a juror that the arsenite of copper in such manufactures was prohibited in France; as injurious to work people. The jury returned a verdict to the effect that the deceased died accidentally, from the effects of mortal disease in her stomach and other organs, occasioned by arsenite of copper used in her employment.—*Brit. Med. Jour.*, Nov. 30, 1861.

**Adulteration.**—A recent number of the *Jersey Morning Express* contains the following paragraph, under the head of "Novel Employment for the Fair Sex."

"The recently opened trade with Japan has afforded the opportunity of importing for English consumption fine green tea at a cheaper rate than from China. The Japanese, like sensible tea drinking people, have not hitherto, even for the sake of extra profit, covered the surface of the leaf with powdered colour, as is done by the Chinese, in order to please foreign customers. Merchants in England, knowing that in Jersey we have no Board of Customs to interfere with their operations, are sending it here to be coloured. This makes the Japanese tea appear like that from China, and therefore it is more seemingly valuable in the London market. Many females are employed to change it from the natural dark olive to the artificial bluish hue, as seen when sold in the shops; the change is effected nearly in the same manner as confectioners colour the surface of sugar-plums for children. There can be no objection to the employment of our poor, as the consumer in England has ultimately to defray the cost; but, notwithstanding this, it is absurd to incur an expense to make tea unwholesome, for the sake of having the leaf more inviting to the eye, as the powdered mineral is, of course, washed off and drank when the infusion is taken at the tea-table. The Japanese fashion of using it in its original purity is decidedly the best, as an infusion made from the unsophisticated leaves must be the most inviting."—*British Med. Journ.*, Sept. 21, 1861.

*Effects of Religious Excitement.*—The annual report of the Irish Lunatic Asylum Inspectors states, that more cases of insanity occurred in Ulster in two months, during the late revival movement, than had taken place in the year. "Religious excitement" is assigned as the cause of insanity in 97 males and 86 females, but it is observable that, though religious excitement was the cause of the breaking down of the mind, the mania is not generally religious. The patient does not rave about religious subjects, but about matters totally different. The religious excitement, like any other violent epidemic excitement, caused the mind to give way in its weakest point, whatever that might have been. "Intemperance and irregularity of life" were the causes of the disease in 241 males and 82 females.—*British Med. Journ.*, Nov. 2, 1861.

*Cholera in India.*—Up to this date not less than 500 English soldiers have fallen victims to cholera, chiefly in the military stations of Delhi, Meerut, Umballa, and above all, Lahore. The epidemic has raged now for six weeks. It showed itself first in a virulent form at Delhi and Meerut. This is the fifth visitation of the kind since 1842. The wave of pestilence has alternately swept down from Cabul to Eastern and Central India, and up from the East into Central Asia, following the Gangetic valley and the great commercial routes. Wherever it has attacked English soldiers it has spared the native troops and prisoners in the vicinity. The effect on the troops at Lahore has been most depressing. The Mean-Meer Brigade has been moved out of cantonments into camp. The medical men available have been overworked. Government, it is said, have appointed a commission of medical and engineer officers to inquire into the circumstances.—*British Med. Journ.*, Nov. 2, 1861.

*British Pharmacopœia.*—The new Pharmacopœia is advancing rapidly to a conclusion, and may be expected to be published next winter, or at latest in the spring of 1862. The work, which has been one of no small labour and difficulty, has occupied the attention of a committee, consisting of physicians, chemists, and pharmacutists, for upwards of three years. A large part of the work has been necessarily carried on by correspondence; and there were many

differences of opinion to be reconciled, prejudices to be overcome, many processes to be tested, old and useless remedies to be struck out, new and useful ones to be introduced. The committees have worked vigorously and harmoniously together; and it may, therefore, be expected that the new *Pharmacopœia*—the result of their combined labours—will do credit to its authors, and to the General Medical Council, under whose auspices it will be published, but prove a great boon to the medical profession and to the public. A conference for the final adjustment of the details of the *Pharmacopœia* has lately been held in Edinburgh, under the able presidency of Dr. Christison. The other members who have attended are—from England, Dr. F. Farre, Dr. Garrod, and Mr. Squire, member of the Pharmaceutical Society; from Ireland, Professor Apjohn, Dr. Aquilla Smith, and Dr. Neligan; from Scotland, in addition to the President, Dr. Andrew Wood, Dr. Douglas MacLagan, Dr. Charles Wilson, and Mr. Robertson, member of the Pharmaceutical Society.—*Brit. Med. Jour.*, Nov. 16, 1861.

*Medical Times and Gazette.*—Mr. T. SPENCER WELLS, who for upwards of seven years has edited this Journal with an ability which has rendered it one of the best of the British Journals, takes a farewell of his numerous readers in the closing No. for this year. We wish him happiness in his retirement and the success in private practice to which his unquestionable ability fully entitles him.

*OBITUARY RECORD.*—Died, on the 10th of December, at Florence, whither he had gone for the benefit of his health, THOS. SOUTHWOOD SMITH, M. D., aged 73 years. Dr. S. was the chief originator in England of the Science of Preventive Medicine, and accomplished more in effecting sanitary reforms in Great Britain than perhaps any other individual.

—At Frenchay, Gloucestershire, Nov. 9, 1861, Sir JOHN CESAR HAWKINS, Bart., in the 89th year of his age.

—In Dublin, Dec. 16th, 1861, Dr. CATHECART LEES, Lecturer on the Practice of Physic in the Ludwick School of Medicine, and for many years Physician to the Meath Hospital, aged 50 years.

—Dec. 9th, Dr. BRICHETEAU, formerly President of the Academy of Medicine, and a physician of great distinction.